

Speaker Presentations

U.S. Department of Transportation
Distracted Driving Summit
Washington, DC
September 21, 2010



Molly Ramsdell, DC Office Director
National Conference of State
Legislatures





NATIONAL CONFERENCE of STATE LEGISLATURES

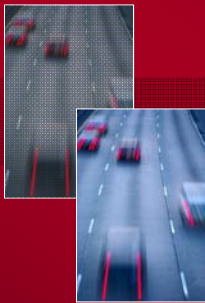
The Forum for America's Ideas

Distracted Driving: Summary of NCSL's Activities

- Spring 2001 - Driver Focus and Technology Forum
- March 2002 - NCSL report, *Along for the Ride*, released. Provides summary of forum meetings and makes policy recommendations.

At the time, New York was the only state with a hands-free law. Arizona and Massachusetts had laws targeting school bus drivers.

- NCSL continues to track state legislative activity and provide state legislatures resources on distracted driving.

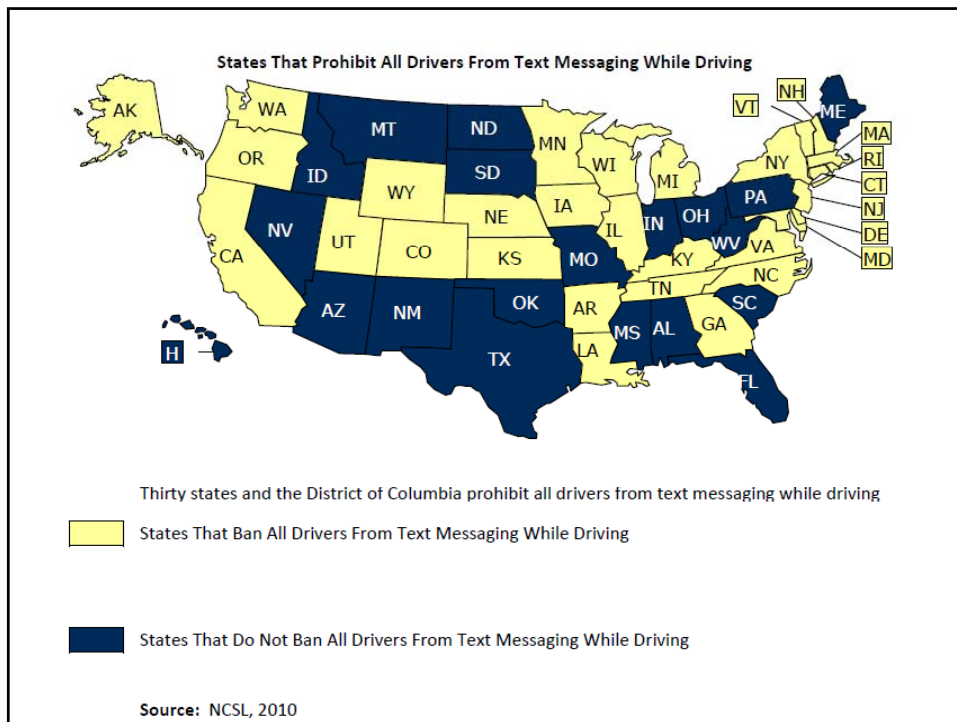


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Distracted Driving: Summary of State Legislative Activity

Year	Number of states that considered legislation	Number of bills introduced	Number of states that enacted laws	Comments
2001	43	140	8	<i>Most required studies</i>
2007	44	130	12	<i>Washington became the first state to adopt a texting ban</i>
2008	33	131	7	
2009	25	222	17	
2010	43	270+	25	<i>30 states and D.C. have passed texting bans</i>



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Distracted Driving: Summary of Select State Requirements

- 30 states and D.C. have passed texting bans. (26 states have primary enforcement)
- 8 states--CA, CT, DE OR, MD, NY, NJ, WA--and D.C. have hands-free laws in place.
- 19 states and D.C. prohibit school bus drivers from using cell phones while operating a bus.
- 28 states and D.C. prohibit new drivers from using cell phones while behind the wheel.



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Resources and Contact Information:

2009 Legisbriefs related to Distracted Driving
Addressing Distracted Driving
<http://www.ncsl.org/default.aspx?tabid=19098>
Texting While Driving Could Spell D-A-N-G-E-R
<http://www.ncsl.org/default.aspx?tabid=18649>

NCSL tracks Distracted Driving issues on our Traffic Safety Legislation Database
<http://www.ncsl.org/default.aspx?tabid=13590>

For information on all distracted driving laws see NCSL's Cellular Phone Use While Driving Laws Chart
<http://www.ncsl.org/default.aspx?tabid=17057>

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Dr. Dan McGehee, Director
Human Factors & Vehicle Safety
Research Division, University of Iowa

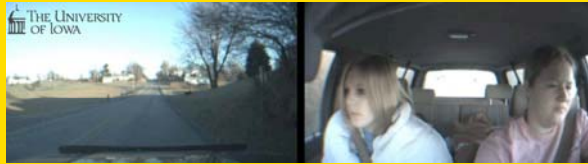
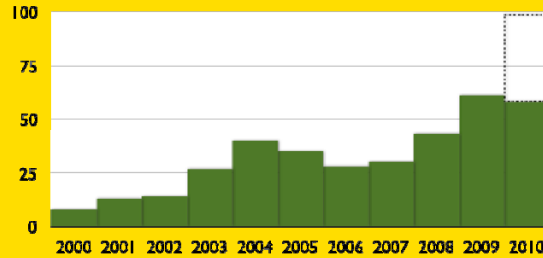

U.S. Department of Transportation

History of driver distraction research



- Senders et al 1967
 - Attentional demand of automobile driving
- Brown et al 1969
 - Interference between concurrent tasks of driving & telephoning
- 1970s-90s: about 30 scientific journal articles
 - 1983 Vision in Vehicles Conference series established

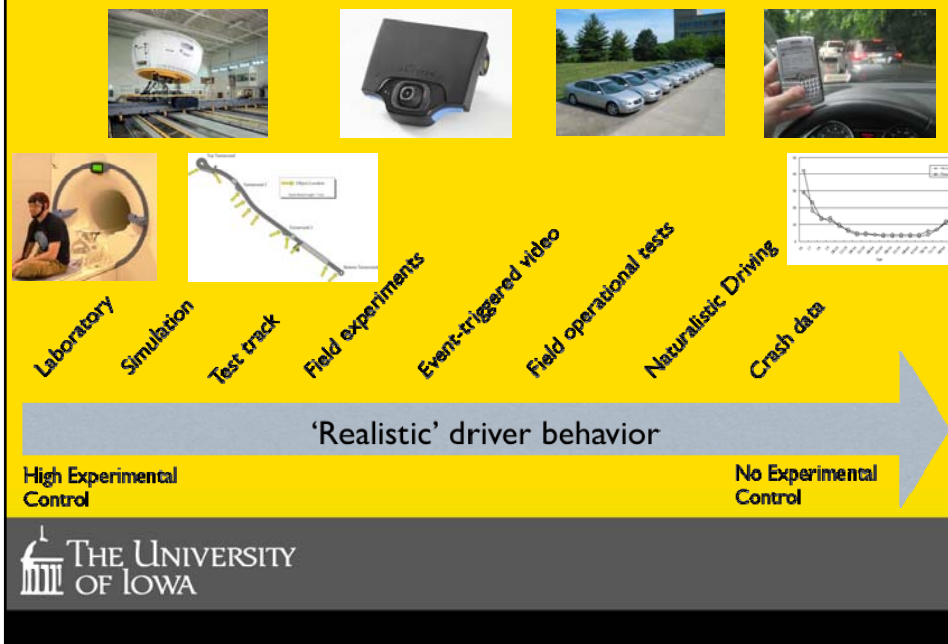
Number of Scientific Journal Articles 2000-2010



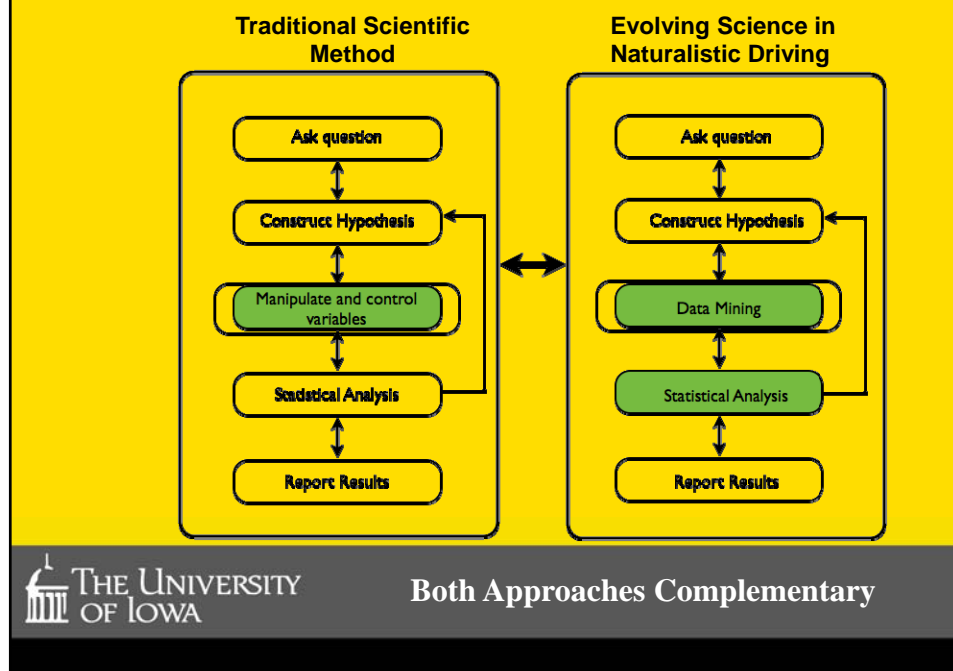
2010 Distraction Research Increasingly Interdisciplinary






Research tools and experimental control



The Search for a Gold Standard in Scientific Methods

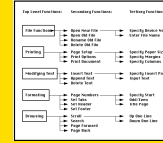


Research Gaps

- Social communication   
- Interface differences



- Cognitive and Physical Task Analyses
- Data collection across research platforms
- Mitigation technologies
- Driver strategy in mobile phone use

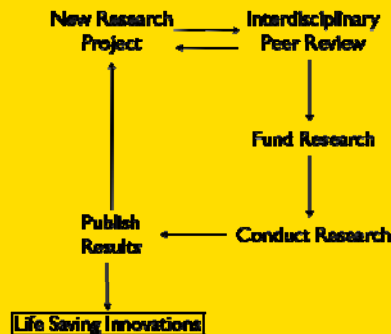


- Individual differences
 - Anticipating trends



Funding more innovation

- Consider NIH and/or ONR research model
- Investigator initiated research
- Interdisciplinary peer review
- Publication metrics
- Increase international collaboration



Officer Shannon Trice
Syracuse Police Department



Syracuse, New York



Citypop: 140,658
Metro pop: 732,117
Square Miles: 26
Road Miles: 407
Yearly Crashes: 7,000
Yearly Fatal Crashes: 09
Yearly DWI arrests: 475
Yearly Tickets: 44,000



Goal Oriented Enforcement

- The Strangest Secret
- Approach Comparison
 - City: 4.2 tickets per hour/2.1 cell tickets per hour
 - Sheriff: 1.8 tickets per hour/1.2 cell tickets per hour
 - State: 1.5 tickets per hour/.8 cell tickets per hour



Enforcement Strategies

- Roadside watching
- Mobile patrol
- Checkpoint
- Looking down from on high
- Enforcement Vehicles
- Pairing offenses



Owen Feltham

"The greatest results in life are usually obtained by simple means and the exercise of ordinary qualities."



Know Your Indicators

- Eye on the driver
- Phone to ear/steering wheel
- Driver's eyes
- DWI driving cues
 - Maintaining lane position
 - Speed and braking problems
 - Vigilance problems
 - Judgment problems

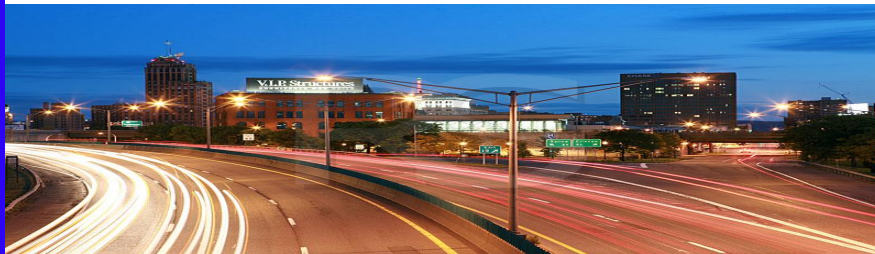
Shannon Trice

"Behavior never lies!"



Know Your Roads

- Volume, Volume, Volume
- Business Districts
- Easy Entrance
- Camouflaged



Summary



The most effective way to influence others is to demonstrate the desired behavior on a consistent basis.

We need to inspire people to follow our advice and example because there is a payoff in the form of improved performance and effectiveness.

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Al Moffatt, President and CEO
Worldwide Partners, Inc.



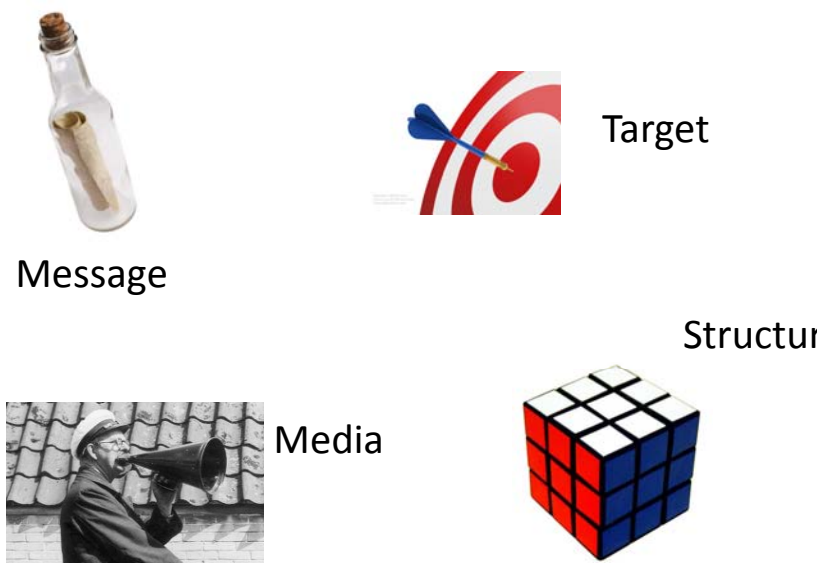
worldwidepartnersinc

Advertising to a distracted world



the more insightful network

worldwidepartnersinc



Message

Target

Media

Structure

Messaging- What's Distracted Driving?



Who Is The Target?



What Is The Media?

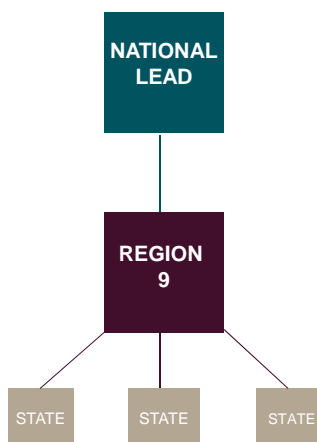
- *Advertising* = Emotional Messenger
- *PR* = Credibility Builder
- *Digital/Social* = Connector & Buzz
- *Direct Marketing* = Action
- *Events* = Relationships

Message, Media & Structure

Foundation - Brand/Adv/PR/Digital

Supervisor - Media/Templates

Grass Roots - Social/Direct/Events



International?

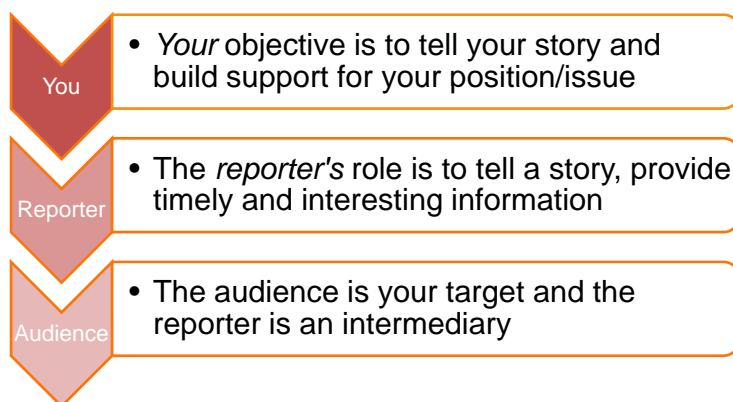
Madalene Milano, Partner
GMMB

Earned Media: The Basics

- Earned media is getting the news media to cover *your* story and *your* message on *your* terms
- All coverage is not equal – there is good coverage and bad coverage
- Earned media is not free – you have to work for it



Develop Your Story



Generating Attention

- News conferences
- Media briefings
- One-on-one meetings
- Editorial board meetings
- Gimmicks/Theater
- A good spokesperson
- Power of a good story
- User generated content and PSAs



Sustaining Coverage

- Commit to a year-round plan
- Develop a plan that includes multiple activities, techniques, events, and channels
- Employ a rhythm – peaks and valleys
- Put a new top on your story or develop new angles
- Attach to other news hooks, such as key spokespeople speaking at high-profile events



Distracted Driving: What Works to Get Ongoing Attention

- Science – release new research; repurpose old
- Surveys
- Demonstrations
- Media ride-alongs with law enforcement
- Real stories/VIP experiences
- Emerging technology
- Celebrities



DISTRACTED DRIVING
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Don Osterberg, Senior Vice President
Schneider National





Topics:

- Evolution of Schneider National's policies on distracted driving...
- Impact of active policies on driver behavior:
 - Challenges with policy enforcement
- Beliefs and the effect on habits and behaviors
- Schneider's affirmation process to imprint new beliefs...
- Looking Ahead...What's needed?



Schneider's Distracted Driving Evolution

1935	• Safety core value established..."Nothing we do is worth hurting ourselves or others..." Al Schneider
2003	• Developed a policy prohibiting cell phone use while driving
2005	• Blanked visibility to in-cab communications technology when the vehicle is in motion
2006	• Shifted from behavior-based safety management to belief-based safety leadership
2007	• Trained all associates on the risks of distracted driving...created a " want-to " versus a " have-to " approach
2009	• Upgraded distracted driving to an "serious" violation, subject to immediate termination... More active / direct approach...
2010	• New in-cab technology with text-to-voice communications...



The Effectiveness of Company Distracted Driving Policies

- Company policies against distracted driving are a significant deterrent to driver distraction and improves safety performance...
- *"Commercial truck and bus drivers are far less likely to use their cell phone while driving under a fleet cell phone policy"* [Conclusions from Virginia Tech Transportation Institute study...Title: Distraction in Commercial Trucks and Buses: Assessing Prevalence and Risk in Conjunction with Crashes and Near-Crashes]
- Policy enforcement is everyone's obligation:
 - Driver managers will NEVER call a driver on their cell phone if the truck is moving...
 - Driver cell phone #s are not kept in database accessible by customer service representatives...
 - If driver recruiters receive a call from a prospective driver on their cell phone, they ask them to find a safe place to park and call back...setting the expectation early on...



- Our beliefs are the basis for our attitudes, which shape our behavior, which leads to safety outcomes (incidents/accident)...

- The critical task is to reprogram our beliefs...

Beliefs

Attitudes

Behaviors

Outcomes





Safety Affirmation...Reinforcing the behavior we want, versus what we don't...



"Because I am a disciplined, safety-conscious professional, I lead-by-example and maintain constant situational awareness while driving."



Signed _____



What's Required:

- Technology to detect and report cell phone use while driving...
 - Integrated with other critical events recorded in the truck (hard braking, roll stability activations, speeding, etc.)
- Increased enforcement
- Broader education...make it personal...
- Create a national culture of safety...

Dr. Linda Angell, Research Scientist
Virginia Tech Transportation Institute

Using Technology To Prevent & Reduce Distraction

A key is to integrate technology properly
with both the **driver**
and with **driving tasks**

- If done well -- can help the driver focus _____→
- If done poorly – can further complicate,
interfere with, and distract the driver _____→



Exemplary Design & Integration For The Driver & Driving Environment

- **Positive Example:** Voice-Based Navigation & Route Guidance
- System adheres to Alliance Driver Focus Guidelines
- System is designed to support the driver in keeping eyes on road, attention forward on traffic /route, and hands-on-wheel
- System verified through testing for use in driving environment



Where can OnStar take you today?

447 Kerby Street, in Creston, Michigan

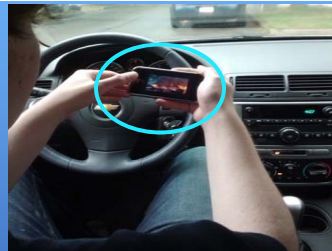
Okay, your route has been calculated and your voiced instructions will begin in a moment.

2

Inadequate Integration of Technology With The Driver & Driving Tasks

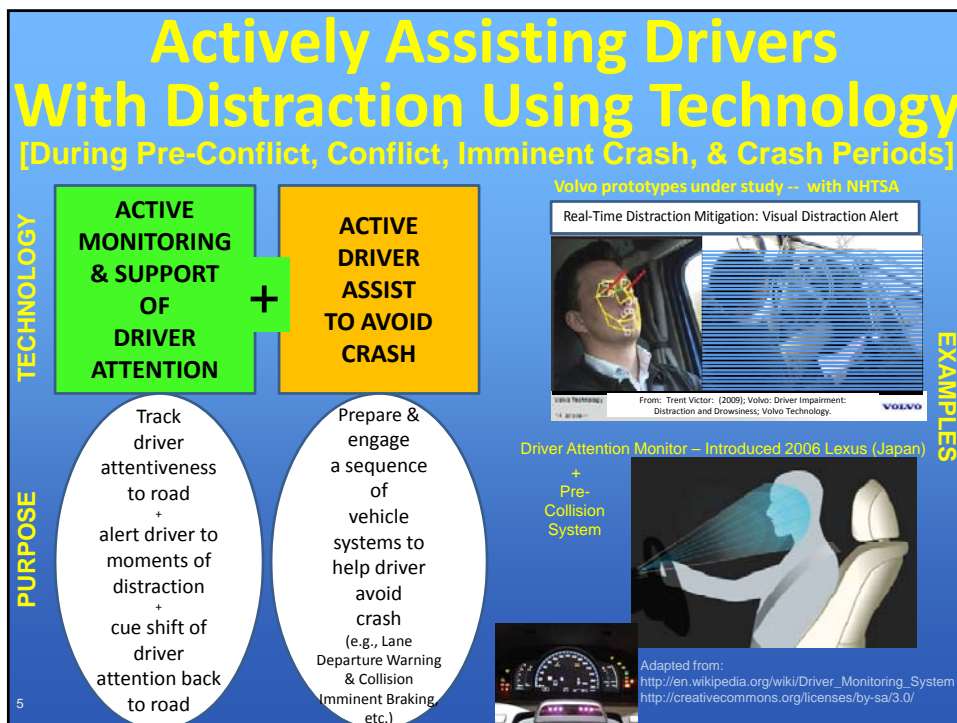
- **Example of Incomplete/Unsuitable Integration:**

Handheld
Carried-In Device
Showing Video
Requiring
Two Handed Operation
And Continuous Gaze
Away From Road at
Tiny Screen



- Device not designed specifically for use while driving
- Does not adhere to industry guidelines limiting distraction
- Device not designed to support driver's need to keep eyes and mind on road – or hands on wheel
- Device usage while driving not tested during development

3



Steps For Harnessing Technology

Work is needed to:

1. Support development of technology solutions to prevent distraction

- Encourage innovation, development
- Evaluate technology solutions carefully to find those that are effective
- Optimize them to deliver benefits & to minimize/eliminate unintended consequences
- Incentivize deployment

2. Integrate technology effectively with the driver and driving task

- Assure that the driver interface for information and telematics systems MINIMIZES distraction
 - » Shared guidelines
 - » Test procedures
- Assure that new technologies for assisting drivers are properly integrated
 - » To prevent/reduce distraction & assist in crash avoidance
 - » To support driver supervisory attention
- Engage all parties --including and beyond automobile manufacturers (portable device manufacturers, 'apps' developers, network providers)

3. Educate drivers to make smart choices in choosing and using technology – and to create a safety culture -- because even the best technologies can only be a partner with *responsible* drivers toward safe outcomes

6

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Barbara Harsha, Executive Director
Governors Highway Safety Association


U.S. Department of Transportation

State Progress on Distracted Driving

- Since January, 12 states have enacted text messaging bans
- GHSA expects that nearly all states will ban text messaging in the next two years
 - NHTSA model law
 - FY 2011 appropriations earmark for texting bans
- At least 27 states have included distracted driving as a priority emphasis area in their Strategic Highway Safety Plans
- As states update those plans, more can be expected to add distraction as a key emphasis area



State Distracted Driving Data Collection

- 43 states collect data on distraction – up from 17 in 2003
- Of those, 34 states collect data that is consistent with the Model Minimum Uniform Crash Criteria (MMUCC) Guideline
- The distraction data element will be updated and expanded next year, final publication in 2012



Driver Education and Licensing

- 23 states have driver education materials on teen driver distraction
- 32 states have sections in their drivers manual on distraction and another 21 discuss the dangers of at least one type of distraction
- 17 states and DC have at least one question on the driver license exam on distraction



Education, Employer Programs

- 41 states are addressing distraction through public education efforts including social media
- 35 states working with other state agencies or private entities to address distraction
- 16 states are working with employers on distraction issues



State Examples

- In the upcoming year, CA expects to spend \$2.7 million in Section 402 funding for a multi-prong DD effort
- MN is partnering with the Governor's office to have a "Distraction Free Driving Day" with increased enforcement, advertising
- In NJ, approx. 10,000 tickets written each month for hand-held cell phone and texting violations
- In MI, an "Thumbs on the Wheel" Campaign was launched
- Other states will roll out campaigns when their new texting/cell phone laws take effect



Bottom Line

- A lot of activity at the state level
- More states can be expected to enact legislation
- Much more research is needed to determine whether any of these countermeasures reduce distraction or have an impact on crashes, fatalities and injuries



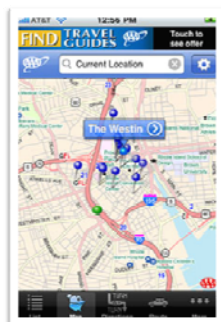
**John Maddox, Associate Administrator
for Vehicle Safety Research
National Highway Traffic Safety
Administration**



A Technology Explosion

"The car is an expensive phone"

DISTRACTED DRIVING

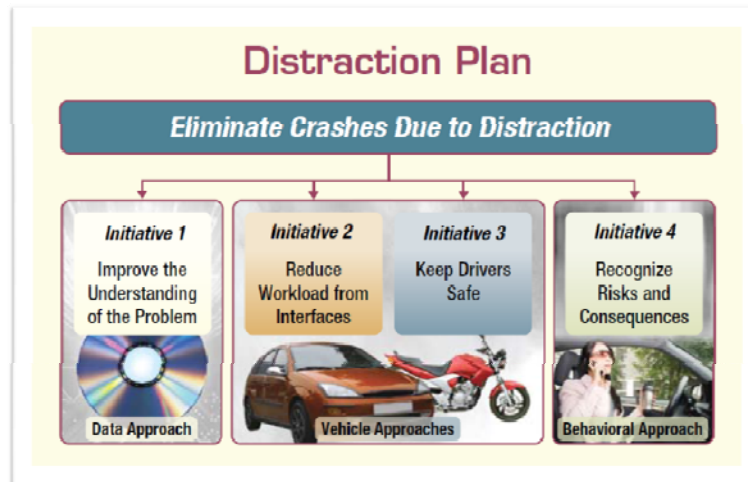


"We're working hard to make the Audi DT, the ultimate mobile device"

"The company that can accommodate as many different mobile devices as possible, and integrate them in the car -- they're the guys who are going to win long term"



Since the Last Summit



Since the Last Summit

• Driver Behavior

- Pilot Test of Low Cost Driver Behavior System - FMCSA
- Evaluate laws and high-visibility enforcement - NHTSA
- Draft and publish sample law for use by states - NHTSA

• Improved Data Collection

- NOPUS cell phone study - NHTSA
- Improved police reporting - NHTSA



Current DOT Research

- **Naturalistic Driving Studies**

- SHRP II - FHWA/NHTSA/FMCSA
- Merge roadway data with vehicle/driving data - FHWA
- Small Scale Naturalistic Driving Study - NHTSA
- 270 Truck Naturalistic Study - FMCSA



- **Driver Support Systems**

- Improve crash warning interfaces - NHTSA
- Assess distraction monitoring systems - NHTSA

Current DOT Research

- **Guidance to Vehicle Manufacturers**

- Develop metrics and visual-manual guidelines - NHTSA



- **Human Factors for IntelliDriveSM**

- NHTSA, RITA, FHWA, FMCSA, FTA
- Develop guidelines to ensure IntelliDrive interfaces are effective without increasing distraction

- **Digital Billboard**

- Evaluate distractions from outside of the vehicle - FHWA



Looking ahead

- Research Needs Moving Forward
 - What additional analysis can be done on the naturalistic data already collected?
 - What is “*True* Hands-Free”?
 - What is the best metric for measuring distraction?
 - How can Cognitive Distraction be measured in real world driving situations?
 - Other ideas...

